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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/487,522	01/19/2000	Bahram G. Kermani	KERMANI-43	3260

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EXAMINER
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SINGH, RACHNA

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/487,522

Applicant(s)

KERMANI, BAHRAM G.

Examiner

Rachna Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-9,11-16,18,19,22,23,25,26 and 28-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-9, 11-16, 18, 19, 22-23, 25-26, 28-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This action is responsive to communications: Amendment filed 1/19/05.
2. Claims 1, 3-9, 11-16, 18, 19, 22-23, 25-26, 28-42 are pending in the case. Claims 39-42 have been added. Claims 1, 9, 16, and 23 are independent claims.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-9, 11-16, 18, 19, 22-23, 25-26, 28-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grefenstette, US Patent 6,289,304 B1, 11/11/01 (filed 3/17/99) in view of Katariya et al., US 6,789,230 B2.

In reference to claim 1, Grefenstette teaches a text summarization using part-of-speech data. Grefenstette teaches the following:

-Receiving a signal from a user input device selecting one of a set of parts of speech removal criteria to obtain summarized text data defining a summarized version of the text. See column 2, lines 32-64 and column 12, lines 25-30. Compare to ***"prompting a user to select an abstracted version of the electronic document to be created from a plurality of abstracted versions available to be created;"***

-Using the input text data and user selection to tokenize the text and obtaining part-of-speech data indicating parts of speech for tokens in the text of each of the tokenized sentences. Using the part-of-speech data for each tokenized sentence to obtain group

data for the sentence indicating one or more groups of consecutive tokens of text and indicating any tokens that meet the part of speech removal criterion. Using the group data for each sentence to obtain summarized text data defining a summarized version of the text for the sentence in which tokens in each group are indicated as meeting the removal criterion are removed. Presenting the summarized version of the text. See columns 2-3 and column 12, lines 9-32. Compare to ***“responsive to the selection by the user of the abstracted version to be created, creating the selected abstracted version of the electronic document by executing a set of instructions corresponding to the electronic document, wherein the instructions, are, before said abstracted version is selected by the user, customized to the electronic document, . . .; and outputting the abstracted version of the electronic document in a predetermined format”***.

Grefenstette teaches summarizing text according to a selection by the user. Grefenstette's "removal criteria" executes a list of instructions to remove certain parts of speech and acts as the claimed "list of instructions". Grefenstette does not state "prompting" the user for the selection, he does teach receiving a user's signal via traditional input techniques, thus it would have been obvious to prompt the user for a selection as it was well known in the art at the time of the invention for one of ordinary skill in the art to receive a prompt requesting an input. See column 2, lines 56-64 and column 6. Grefenstette's system executes instructions regarding parts-of-speech removal criteria, which when applied is "customized" to that document; however, he does not teach that the instructions are customized before selection thereof. Katariya

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teaches a summary generating system that calculates a weight for each of the sentences in a document. The summary generating system then selects a sentence based on their calculated weights. The summary generating system creates a summary of the selected sentences. Compare to ***“the customization comprising a plurality of weights pre-assigned to respective portions of the electronic document to enable creation of said plurality of abstracted versions”***. See abstract and columns 1-2. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya's instructions, specific to the electronic document, for generating a summary in the system of Grefenstette since extends Grefenstette's summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

In reference to claim 3, Grefenstette teaches that executing the “removal criteria” creates a summarized version of the text. See column 2, lines 15-64.

In reference to claim 4, Grefenstette teaches that the user's selection of removal criteria is specific to each document or text group. See column 2.

In reference to claims 5-8, Grefenstette teaches that the set of instructions or removal criteria can be specified to remove various parts-of-speech such as verbs, articles, adverbs, and adjectives. See column 2, lines 32-44 and column 5, lines 29-49.

Claims 9 and 11-15 are rejected under the same rationale used above in claims 1 and 4-8 respectively.

Claims 16, 18, 19, and 22 are rejected under the same rationale used above in claims 1, 4-5, and 8 respectively.

Claim 23 is rejected under the same rationale as claim 1 above.

In reference to claim 25, Grefenstette teaches that the user's selection of removal criteria is specific to each document or text group. See column 2.

In reference to claims 26 and 28, Grefenstette teaches that the set of instructions or removal criteria can be specified to remove various parts-of-speech such as verbs, articles, adverbs, and adjectives. See column 2, lines 32-44 and column 5, lines 29-49.

In reference to claims 30-32, Grefenstette's system teaches that executing a set of instructions or "removal criteria" will generate an abstracted version of a document. See column 2, lines 15-31.

In reference to claims 33-36, Grefenstette teaches that different types of POS will have different weights associated with it. See column 9. Katariya teaches a summary generating system that calculates a weight for each of the sentences in a document. The summary generating system then selects a sentence based on their calculated weights. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya's instructions that are specific to the electronic document in the system of Grefenstette since extends Grefenstette's summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of

Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

Claims 37-38 are rejected under the same rationale used in claim 1 above.

In reference to claims 39 and 41, Grefenstette's system executes instructions regarding parts-of-speech removal criteria, which when applied is "customized" to that document; however, he does not teach that the instructions are customized before selection thereof. Katariya teaches a summary generating system that calculates a weight for each of the sentences in a document. The summary generating system then selects a sentence based on their calculated weights. The summary generating system creates a summary of the selected sentences. See abstract and columns 1-2. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya's instructions, specific to the electronic document, for generating a summary in the system of Grefenstette since extends Grefenstette's summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

In reference to claims 40 and 42, Grefenstette discloses receiving a signal from a user input device selecting one of a set of parts of speech removal criteria to obtain summarized text data defining a summarized version of the text. See column 2, lines 32-64 and column 12, lines 25-30. Grefenstette discloses using the input text data and user selection to tokenize the text and obtaining part-of-speech data indicating parts of

speech for tokens in the text of each of the tokenized sentences. Using the part-of-speech data for each tokenized sentence to obtain group data for the sentence indicating one or more groups of consecutive tokens of text and indicating any tokens that meet the part of speech removal criterion. Using the group data for each sentence to obtain summarized text data defining a summarized version of the text for the sentence in which tokens in each group are indicated as meeting the removal criterion are removed. Presenting the summarized version of the text. See columns 2-3 and column 12, lines 9-32. Grefenstette teaches summarizing text according to a selection by the user. Grefenstette's "removal criteria" executes a list of instructions to remove certain parts of speech and acts as the claimed "list of instructions". Grefenstette does not state "prompting" the user for the selection, he does teach receiving a user's signal via traditional input techniques, thus it would have been obvious to prompt the user for a selection as it was well known in the art at the time of the invention for one of ordinary skill in the art to receive a prompt requesting an input. See column 2, lines 56-64 and column 6. Grefenstette's system executes instructions regarding parts-of-speech removal criteria, which when applied is "customized" to that document; however, he does not teach that the instructions are customized before selection thereof. Katariya teaches a summary generating system that calculates a weight for each of the sentences in a document. The summary generating system then selects a sentence based on their calculated weights. The summary generating system creates a summary of the selected sentences. See abstract and columns 1-2. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate



Katariya's instructions, specific to the electronic document, for generating a summary in the system of Grefenstette since extends Grefenstette's summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

***Response to Arguments***

6. Applicant's arguments filed 01/19/05 have been fully considered but they are not persuasive.

In reference to claims 1, 9, 16, and 23, Applicant argues that Grefenstette does not teach, "selecting a set of instructions for abstracting the electronic document, wherein the instructions are before selection thereof, customized to the electronic document". Grefenstette teaches that a user input device selects one of a set of POS based removal criteria and a summary is generated according to that input. Examiner has utilized Katariya, US 6,789,230 to illustrate a system in which instructions for generating a summary are specific to the document. Katariya teaches a summary generating system that calculates a weight for each of the sentences in a document. The summary generating system then selects a sentence based on their calculated weights. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya's instructions that are specific to the electronic document in the system of Grefenstette since extends Grefenstette's summarizing of an electronic document by calculating the importance of specific sentences within the

document that would be relevant to the subject of interest of a user. See column 1-2 of Katariya in which he discloses the need to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

Katariya's summary generating system executes a set of instructions which are customized to the document before being executed. See column 4, lines 21-67 in which Katariya teaches, ***"the summary generating system generates the summary based on the weights of the sentences of the document"***. The weights indicate the importance of the sentence to the document which are later used by the sentence summary generator.

Applicant argues Grefenstette and Katariya do not disclose that the user can select from a plurality of different abstracted versions of the electronic document that can be created. Examiner respectfully disagrees. Grefenstette teaches receiving a signal from a user input device selecting one of a set of parts of speech removal criteria to obtain summarized text data defining a summarized version of the text. See column 2, lines 32-64 and column 12, lines 25-30. Grefenstette further teaches using the input text data and user selection to tokenize the text and obtaining part-of-speech data indicating parts of speech for tokens in the text of each of the tokenized sentences. The part-of-speech data for each tokenized sentence is used to obtain group data for the sentence indicating one or more groups of consecutive tokens of text and indicating any tokens that meet the part of speech removal criterion. The group data for each sentence is used to obtain summarized text data defining a summarized version of the text for the sentence in which tokens in each group are indicated as meeting the

removal criterion are removed. The summarized version of the text is presented. See columns 2-3 and column 12, lines 9-32. Grefenstette teaches summarizing text according to a selection by the user. Grefenstette's "removal criteria" executes a list of instructions to remove certain parts of speech and acts as the claimed "list of instructions". Grefenstette does not state "prompting" the user for the selection, he does teach receiving a user's signal via traditional input techniques, thus it would have been obvious to prompt the user for a selection as it was well known in the art at the time of the invention for one of ordinary skill in the art to receive a prompt requesting an input. See column 2, lines 56-64 and column 6. Since Grefenstette discloses that the user can select "removal criteria" which executes a list of instructions to remove certain parts of speech, he discloses different abstracted version of the electronic document based on the removal criteria as a different removal criteria would generate a different abstracted version of the electronic document. Katariya teaches a summary generating system that calculates a weight for each of the sentences in a document. The summary generating system then selects a sentence based on their calculated weights. The summary generating system creates a summary of the selected sentences. See abstract and columns 1-2. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Katariya's instructions, specific to the electronic document, for generating a summary in the system of Grefenstette since extends Grefenstette's summarizing of an electronic document by calculating the importance of specific sentences within the document that would be relevant to the subject of interest of a user. See column 1-2 of Katariya in which he discloses the need

to select sentences based on their level of importance in order to generate a summary of a document that is relevant to the user.

Newly added claims 39-42 have been rejected above.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachna Singh whose telephone number is 571-272-4099. The examiner can normally be reached on M-F (8:30AM-6:00PM). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RS

05/10/05



**JOSEPH FEILD**  
**SUPERVISORY PATENT EXAMINER**